

CLAIMS:

1. A method of composing a scene content from digital video data streams containing video objects, said method comprising a decoding step for generating decoded object frames from said digital video data streams, and a rendering step for composing intermediate-composed frames in a composition buffer from said decoded object frames,
5 characterized in that said method also comprises a scaling step applied to said intermediate-composed frames for generating output frames constituting scene content.

2. A method of composing a scene content as claimed in claim 1, characterized in that it comprises:

10 - a partitioning step for identifying non-extensive data manipulation steps,
- a partitioning step for identifying extensive data manipulation steps,
said method being designed to be executed by means of a signal processor and a signal co-processor which perform synchronized and parallel processing steps for creating simultaneously current and future output frames from said intermediate-composed frames,
15 the signal processor being dedicated to said non-extensive data manipulation steps, and the signal co-processor being dedicated to said extensive data manipulation steps.

3. A method of composing a scene content as claimed in claim 2, characterized in that the scaling step of a current intermediate-composed frame is designed to be performed
20 by the signal co-processor while the decoding step which generates decoded object frames used for the composition of the future intermediate-composed frame is being performed simultaneously by the signal processor.

4. A method of composing a scene content as claimed in claim 3, characterized
25 in that during the scaling step, the decoding step is limited to decoding a maximum number of object frames used for the composition of future intermediate-composed frames.

5. A device for composing a scene content from digital video data streams containing video objects, said device comprising decoding means for providing decoded

object frames from said digital video data streams, and rendering means for composing intermediate-composed frames in a composition buffer from said decoded object frames, characterized in that said device also comprises scaling means applied to said intermediate-composed frames for generating output frames constituting scene content.

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6. A device for composing a scene content as claimed in claim 5, characterized in that it comprises separate processing means composed by a signal processor which is dedicated to non-extensive data manipulation tasks, and by a signal co-processor which is dedicated to extensive data manipulation tasks, said processing means being designed to execute synchronized and parallel calculations for creating simultaneously current and future output frames from said intermediate-composed frames.

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7. A device for composing a scene content as claimed in claim 6, characterized in that the scaling means applied to a current intermediate-composed frame are designed to be implemented by the signal co-processor while the decoding means providing decoded object frames used for the composition of the future intermediate-composed frame are designed to be implemented simultaneously by the signal processor.

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8. A device for composing a scene content as claimed in claim 7, characterized in that during the scaling step, the decoding means are limited to decoding a maximum number of object frames used for the composition of future intermediate-composed frames.

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9. A set top box designed for composing a scene content from digital video data streams encoded according to the MPEG-4 standard and carrying out a method as claimed in claim 1.

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10. A computer program product for a device for composing a scene content from decoded object frames, comprising a set of instructions which, when loaded into said device for composing, causes said device for composing to carry out the method as claimed in claim 1.

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